10 ideas for 21st century education

Innovation Unit

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We are the innovation unit for public services. As a not-for-profit social enterprise we're committed to using the power of innovation to solve social challenges. We have a strong track record of supporting leaders and organisations delivering public services to see and do things differently. They come to us with a problem and we empower them to achieve radically different solutions that offer better outcomes for lower costs.

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Introduction:
Education for today's future

People make a lot of assumptions about education. Lessons should last for about an hour. Mobile phones should be switched off during school. Students should learn in classrooms. And, fundamentally, students come to school to learn, and teachers come to school to teach. These assumptions are so common because they match the way that most of us were educated.

But this version of education was designed in and for a very different time, and there's no reason to assume that it will meet the needs of today's learners.

In fact, despite the fact that teachers are working as hard as they have ever worked, schools are struggling to engage young people. As children grow older they become less and less engaged in school – when one would hope that the reverse would be true. And this is a bigger problem for the most disadvantaged students, who consistently show lower levels of engagement. This contributes to restrictions on social mobility. In the UK, for example, if you are an academically high-achieving eleven-year old and you receive free school meals you are unlikely to be classed as 'high achieving' by the time you turn sixteen.

Schools are also struggling to prepare young people for work. Businesses have complained that they're taking on employees who lack crucial basic employment skills such as problem solving, team-working and time management, and reported that they need to provide training to school and college leavers in order to prepare them for their jobs.

This only covers the problems of today. In the coming decades, the changes we are experiencing now - to politics, economics, technology, and climate – will become even more dramatic. In the US, the ten jobs most in demand didn't exist in 2004 – 21st century education needs to prepare young people for jobs that don't exist yet, using technologies that haven't even been invented, for which competition will be global. If we are to develop candidates who are capable of holding their own on a global stage we simply must get better at equipping them with the skills to handle this uncertain future.

Education systems have been resistant to change because education is so important – too important, some would argue, to experiment with. There is another way to look at this: in a rapidly changing world, education is too important to be left behind.

In response to this, schools are starting to do education differently. Why restrict lesson times to an hour when half-day sessions allow students to delve really deeply into subject material? Many young people have smart phones, so why not allow them to be used as learning aids? Adults learn in the real world, why not let students? And, fundamentally, the best teachers are people who love learning, and the best way to make sure that you understand what you are learning is to teach.

The schools that are taking this seriously are still in the minority. But around the world there is a growing global movement towards achieving the vision of 21st century education. Here we present our view of what this vision looks like in practice.

Open up lessons

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The 45–60 minute lesson has reigned supreme in school systems around the globe for a long time, forcing teachers to execute their lesson plans with military precision. Never mind if students haven't fully grasped the subject matter before the bell rings – time, after all, waits for no man. Increasingly, however, schools are shifting away from the conception of the lesson as a rigid, subject-specific unit of time that takes place within the four walls of a classroom, instead embracing the idea that a lesson can be many things. Organic or structured. Long or short. Based within or beyond school premises. And as the structure of lessons diversifies, so too does the role of the teacher.

Many educators, finding rigid timetables to be too inflexible, have solved this by getting rid of lessons altogether. Schools such as the Kunskapsskolan schools in Sweden and the Lumiar schools in Brazil are instead organised around individual learning plans or group projects that vary in length. In these instances, the allocation of space, time and resources is not fixed. Instead, it is up to the students to decide on how they will make best use of them in order to meet their learning objectives. Teachers support students throughout this process and monitor their progress closely.

But opening up lessons does not have to be as radical as this.

It can also simply be about extending or shortening the lesson in a manner which allows for a more flexible style of teaching. While still not the 'norm', educators are realising the benefits of offering longer lessons that give students an adequate length of time to pursue their own lines of enquiry or to carry out extended projects. In the UK, the Royal Society of Arts' *Opening Minds* curriculum advocates, among other things, three-hour lessons that give teachers and students the chance to explore cross-curricular topics in depth. Schools which have embraced this approach have reported higher levels of staff satisfaction, along with greater levels of maturity and independence among students. A similar principle is at work at Cramlington Learning Village, where science experiments are conducted in half day blocks to allow students to become fully immersed in their research.

Recognising the value of flexible, personalised learning, educators are also using technology in exciting ways to transform traditional 'lessons'. In the US, the Khan Academy, a non-profit educational organisation, uses online teaching content to offer the 'flipped classroom' approach, whereby information is transmitted outside of school hours through online instruction. This frees up classroom time for the in-depth discussion, interrogation and practical application of the content, maximising opportunities for productive teacher-student interaction. Research has shown that this inversion of traditional 'class time' and 'homework' is highly effective, with students who had participated in this model scoring an average of 74% on tests, compared with 41% for students who were more traditionally taught.

With the help of technology and radical reimagining of time and space, then, lessons no longer have to adhere to the 'one size fits all' approach characteristic of the traditional system. Students stand to gain a lot from more personalised lessons and greater control over their own learning, but they are not the only ones. The implications for teachers are also exciting. They become freer to take on different roles, including mentor, coach and designer of projects that highlight the real-world relevance of subject material. This creates the potential for them to have a deeper, more fulfilling engagement with students, and a more creative part to play in the design and delivery of curricula.

Image courtesy of High Tech High

Think outside the classroom box

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In a traditional classroom, students sit in rows at individual desks or small tables, facing the teacher. There's a very good reason for this: they are designed so that teachers can efficiently transmit information to groups of students. This made sense when teachers were students' most accessible information sources. But in an age in which wireless internet means we are literally surrounded by information, we no longer need students in rows facing the teacher. The pursuit of 21st century skills – collaborative problem-solving, IT, information and economic literacy – require 21st century teaching methods. The role of teachers can no longer be to impart knowledge but to guide, discuss and, of course, measure the progress of students so that they know when more support is needed. Today, innovative schools are designing classrooms for the pursuit of knowledge, rather than its conveyance, and even doing away with them altogether.

Cramlington Learning Village in Northumberland, UK, is rethinking its classrooms by conducting science classes in an Open Learning Science Plaza divided into a set of zones set up for discussion, research and experimentation. Students are free to tackle complex problems, working wherever they decide they need to be, not where they're told to be. The experimental zone is even equipped with webcams that allow students to monitor their experiments over the weekend.

Cramlington's attitude to learning space is echoed by Sweden's Kunskapsskolan schools, which treat all space within a school as 'learning space'. Thus, there are no corridors and, by extension, no classrooms. Students can book particular areas for meetings or seminars, or just grab a seat and get some work done.

This way of thinking about learning space has inspired some of Sweden's top architects, but it can also be implemented in existing school buildings at no added cost – the point is not the space itself, but how you think about it. In fact, some learning communities are working without a designated 'space' whatsoever – like PLACE, a group of learners who are affiliated with Biddenham International School in Bedfordshire, UK.

Instead, they (and their parents) organise their own learning – getting together in groups, commissioning local experts or teachers to cover specific subjects or help with projects, or working entirely on their own. PLACE is not just a learning community that extends beyond the school walls, it is one which lives outside them.

These are just a few of the ways that classrooms are changing, expanding and even disappearing, now that we no longer need them to be knowledge-delivery centres. In classrooms, as with many things, the future is flexible.

Image courtesy of Ørestad Gymnasium

Get personal

In England, when we talk about a child with 'special educational needs', we are referring to a child with diagnosed learning difficulties. But the fact is that everybody has 'special educational needs': we approach problems in our own way, grasp concepts at our own pace, and respond differently to different kinds of feedback. Good teachers have always taken account of this, but the structure of conventional schools limits the extent to which they can personalise learning. In most schools everyone studies the same thing, at the same time, in the same way. What is personalised, generally, is how much they are expected to understand. This has come about because when one teacher is presenting material to a large class and then personally gauging how much of it each of them has learned to apply, there is not enough time to provide each student with a course of learning tailored uniquely to suit them. However, this is beginning to change, partly (though not entirely) because of digital technology.

Digital technology allows teachers to keep track of students' progress all the time without spending hours on marking – thereby creating unprecedented opportunities for personalised learning.

One of the most dramatic examples of this is School of One, a maths programme being piloted in New York City, USA. Each morning, every student is given a bespoke 'playlist' of classes, which includes lectures, seminars, small discussion groups, computer games and one-on-one sessions with staff. Nobody needs to spend any time producing these playlists: they are generated by computers based on each student's performance on assessments at the end of the previous day. This way, students pursue personalised curricula, while getting the benefits of learning in groups with their peers. Meanwhile, their teachers (whose marking load and planning time are radically reduced) are able to devote more time to designing projects and working with students one-on-one and in small groups. This is an extreme instance of the potential for computers to help teachers personalise learning, but it is only one of many examples of schools taking advantage of new technology.

Project-based learning offers even more radical opportunities for personalisation, because it allows students to draw on their passions, skills, and interests in order to create work that is meaningful to them. This works, because every project has a few 'non-negotiables' and a host of elements that students can personalise for themselves – in project-based learning it is the students, not the teachers, who are responsible for personalising the work.

At Matthew Moss High School in Greater Manchester, UK, students design their own projects, based on their own passions, refining their plans with help from their teachers and peers – these student-led projects have included building a catapult, designing and making t-shirts 'from scratch', building a car engine from parts, and refereeing a netball match (this last one chosen by a student with severe learning difficulties).

Some teachers are taking a more unstructured approach to this 'passion-driven' learning, for example by giving students half an hour of 'independence time' at the start of the day to pursue whatever they are interested in, using all the resources available to them.

Digital technology, project-based learning and passion-driven learning point the way to completely different ways of learning in school, in which students do work that matters to them, underpinned by frequent (but unobtrusive) assessment that ensures that they are learning the concepts they need to know as they progress, and that every student can attain mastery of these concepts, however long it takes them to do so.

Image courtesy of Kunskapsskolan

Tap into students' digital expertise

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Imagine you have been given an urgent task to do at work which requires a bit of research. Unfortunately, you only have 60 minutes of scheduled computer access today, and it doesn't begin for another four hours. You have a smartphone, but you're not allowed to use it in the building. What do you do? It seems obvious that any professional work produced in this context would be lacking in scope and accuracy. Technology has revolutionised our relationship with information in the real world, and we take for granted our ability to access it anywhere, at any time. This is even more pronounced for young people who have grown up with technology as an integral and ever-present part of their lives. Today's students are natural investigators, researchers and synthesisers of information. These skills can be put to powerful use in any classroom: the days of IT as a discrete subject, taught at designated times in computer labs, are numbered.

Introducing technology into learning can be as simple as lowering an internet firewall to allow students to tap into resources on a scale and depth that no school library could ever match. And it isn't just about gathering information: **social networking sites can encourage peer-to-peer learning and collaborative research**. For example, at the Science Leadership Academy in Philadelphia, USA, students run Facebook science groups containing revision material, videos, links to articles and discussions to which other schools can contribute and use for their own learning.

Online chat, instant messaging and email can help to strengthen the student-teacher relationship, while Twitter hashtags allow students to collate observations during science experiments and field trips. Blogging sites provide an immediate audience for students' work that goes far beyond their traditional audience of teachers and classmates. At Heathfield Primary School in Nottingham, UK, learners as young as five blog about their lessons, compete for a blog of the week prize and communicate with students around the world – with increased literacy levels, particularly among boys, as a result.

Some schools are allowing students to use their phones in classrooms, harnessing the communication and research methods that they use in their everyday lives and removing the need for expensive laptops. Schools in Lewisville, Texas, encourage the use of phones as learning tools through a Bring Your

Own Technology programe. During class, students text questions and comments which are displayed on interactive whiteboards for the whole class to see. This encourages debate and gives a platform to students who lack confidence in verbal discussions or worry about asking 'stupid' questions.

At schools like Ørestad Gymnasium in Denmark, where technology and pedagogy are inextricably linked, teachers devote time to educating students on the use of technology in learning – developing skills such as assessing the credibility of sources and solving complex problems by utilising the appropriate research tools. The responsibility for choosing and using technologies is in the hands of students, who present work in whichever format they believe best showcases their learning – including creating project podcasts combining audio, text, images and video. Smartphones are used to record lessons and science experiments for later editing and review.

Using technologies in which students are already well versed is a powerful way to support independent, enquiry-based learning and peer collaboration, increase standards of written work and allow for instant and reflective forms of assessment. It also has huge potential for unlocking student engagement. By integrating technology into learning experiences, we can better integrate school into students' lives, which means students are more engaged in their learning inside and outside of school.

Image courtesy of Lumiar Institute

Get real with projects

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Today, a growing number of young people are learning by carrying out projects that require them to carry out research across subject boundaries, create a professional-quality product that demands multiple drafts, and publicly present their work to their peers, their parents and the wider world.

A particularly striking example of this is the Build San Francisco Institute, a half-day high school programme for students interested in design and architecture. One cohort of students at the institute worked on a civic art project to design a set of tiles to decorate the Port of San Francisco's new Pier 14. They were given just 10 weeks to create the tiles, from concept to final installation. The process taught them a range of new skills: they learnt about the kind of discipline needed in order to meet real deadlines, the organisation required to get the best out of a team, and the importance of resilience – their work was initially rejected by the urban designer who critiqued it, on the basis that their maritime theme was too 'vague', and they had to go away and come up with a better idea. Today, you can see their final versions embedded in the walls at Pier 14.

Projects like this give students an experience of working in teams, managing their own time, and presenting their work to a mixed audience – all skills that will be valuable in the workplace. But they also do more. They open schools up to their communities, because students conduct research beyond the school walls, and local businesses (like Port of San Francisco) start commissioning projects of their own. They give teachers the opportunity to be designers, creating the conditions for learning to take place, as well as being purveyors of knowledge. And, most importantly, they send a message to students that learning is important – not just to their teachers, but to the host of people they work with on their projects; not just for young people, but for everybody; not just in school, but all the time, and everywhere. Projects help students develop into lifelong learners and in this rapidly changing, digital age, we need people who are good at learning.

The most effective projects share three characteristics: students create numerous drafts before producing a final product, there are frequent opportunities to critique each others' work, and the finished product is exhibited publicly. These three things – redrafting, critique, exhibition – are critical, because they instil an ethos of high-quality work in both students and staff.

When well-designed projects are developed in this way, with input and feedback from a range of sources, they enable students to gain the very skills – such as commitment, problem-solving and adaptability – that employers are demanding from graduates. They also cross the borders between subjects, between 'academic' and 'vocational' learning, and between the worlds of adults and students. This is important, because when you're an adult, the world never divides itself up into neat little categories – that only ever happens when you're in school.

Image courtesy of Big Picture Learning

Expect (and help) students to be teachers

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The job of a teacher is a challenging one, encompassing a diverse range of roles and responsibilities. But this does not mean that teachers have skills and qualities that belong exclusively to them: students, too, have long been informally inspiring, advising, supporting and offering a listening ear to their friends and classmates. Indeed, schools are beginning to recognise the potential of harnessing and developing these assets in order to help students to work in complementary ways alongside teachers, enabling them to play a more active part in shaping their own education and that of their peers.

After all, students often have a natural sense of what their peers find interesting, and can thus act as effective tutors. The Student Technology Leadership Programe, run by Jefferson County Public Schools in the US, organises camps where students produce films of historical events, which they then show to their peers. One pair of 10-year-old girls chose to tell the story of Claudette Colvin, a 15-year-old black girl who became a pioneer of the African-American civil rights movement when she refused to give up her seat at the front of a public bus. By focusing on the experience of a young person with whom they could all more easily identify, the girls were able to make this piece of history seem more relevant to their classmates. Such an activity has a clear benefit for the 'student teachers' as well: not only must they digest and understand the subject matter, but they must also think about how to present it in a way that will be engaging and memorable for others, and this encourages them to think more deeply about the material.

Students also have much to offer as mentors and coaches. The Fife Peer Learning Experiment, UK, a long-term project in which primary school students were paired up to help one another with reading and mathematics in weekly 1 to 2 hour sessions, was found to have a transformative effect on students' attainment, behaviour and levels of maturity. Results were particularly positive when weaker readers or less well-behaved students in the older age group acted as the 'mentors' of younger students of a similar ability, significantly boosting their self-esteem and communication skills. The project also saw a significant rise in the numeracy and literacy levels of the mentors and mentees involved.

Some innovative schools are giving students a real stake in and influence over the organisation and delivery of their education. The Harris Federation of Academies' Student Commission on Learning in south-east London gave more than one hundred students the opportunity to work in teams with teachers to investigate the most effective approaches to teaching and learning. Their research culminated in a set of recommendations that the federation has committed to implementing. These include proposed new roles for students that will enable them to do things traditionally restricted to teachers, such as reviewing and designing key elements of the curriculum.

Of course, creating a more fluid relationship between 'teachers' and 'students' in the kinds of ways outlined here is not easy, and needs to be built on a strong foundation of mutual respect, understanding and trust. Yet, where schools have been daring enough to share responsibilities with students in an authentic and meaningful way, results have been extremely positive. Outcomes show improvements in academic achievement, but also wider positive benefits such as an increase in the quality, frequency and flexibility of learning relationships – all of which lead to deeper engagement and the creation of school communities that work together to make education as good as it can be.

Image courtesy of Matthew Moss High School

Help (and expect) teachers to be students

The challenges of the 21st century place demands on young people to be good learners. They need to be resilient learners, able to make mistakes and learn from them. To be independent learners, willing to take ownership of their learning. And to be flexible learners, ready to use different learning strategies to navigate and adapt to a rapidly changing world. If students are to achieve this they must have effective 'teachers of learning', who fully understand the process of learning – and the best way for teachers to achieve this is to become learners themselves.

The most inspiring people are those who lead by example. It follows that **the most inspiring teachers are the ones who are passionate about learning** – who are as excited as their students to learn the answers to their enquiries, and who are constantly gathering new insights and ideas from a range of sources, both from within the teaching profession and beyond it.

There are growing numbers of educators who recognise this fact – such as the teachers who participate in Eastfeast's week-long annual 'Summer University', UK. Here, they learn from a team of gardeners and artists about how to create an 'outdoor classroom', in which they can explore the physical environment with their students through activities such as growing edible food.

Teachers have also taken learning entirely into their own hands by hosting 'teachmeets' – informal conferences in which members of the audience are chosen randomly to give either two-minute or seven-minute presentations about education-related topics that they're excited about. These are being organised all over the the UK, and hundreds of teachers are attending – not because anybody's telling them to, but because they are hungry to learn more about their vocation.

As in a range of other professions and disciplines, engaging with research can also serve as a critically important force for innovation and improvement in education. Unfortunately, a top-down approach to professional development and a jam-packed timetable have conspired to discourage most teachers from keeping abreast of research developments. To overcome this, strategies and structures need to be put in place to make learning through research, and learning as researchers, integral to teachers' work. High Tech High, a group of charter schools in San Diego, USA, has addressed this by creating its own Graduate School of Education, as part of which teachers conduct their own research projects, using their classrooms as laboratories. Many of these teacher-students go on to contribute to High Tech High's own *Journal of Adult Learning in School*.

Teachers are busy people, and it might be argued that lack of time prevents them from really learning, evaluating and reflecting upon their educational practice. And yet in all of the examples described here, we see evidence of teachers collaborating with other teachers and professionals to expand their thinking about education. The desire to learn is strong among teachers, but it is important that they are given adequate platforms – both at a school and system level – to pursue it. By being encouraged and supported to learn, teachers can acquire skills and knowledge that enable them to enrich the curriculum and the student experience, while also leading the way in cultivating a culture of learning that the younger generation can emulate.

Image courtesy of Colegio Cardenal de Cracovia

Measure what matters

Assessment matters. What we choose to assess inevitably determines what is taught. And how we assess it influences how we teach it. Therefore, the question that every educational system must ask is, "Are we assessing what we want students to be able to do once they finish school?" If we want students to leave school prepared for adulthood, we need to make sure they have experienced and mastered the skills they will need in a context that accurately reflects the world outside the school walls.

In an age where we have so much information at our fingertips through the internet, the ability to store facts is not as useful as it used to be. It isn't a useless skill, but it has become less relevant in our digital age. On the other hand, 'higher order' skills, like acquiring, analysing and synthesising information, are extremely valuable – as are 'wider' skills such as working well in teams, using initiative, problem-solving and creativity. These are the skills that employers are looking for, and these are the skills we need for the 21st century. And if we want our curriculum to teach these skills, our assessments need to focus on them.

Once we know what to assess, it becomes clearer which assessment methods we need to use. In schools, 'assessment' has predominantly come to mean exams – which, for the most part, test what students have memorised and can recall. Does the average exam test for the higher order skills mentioned above? We don't think so. Creating lifelong learners who are equipped with a whole range of skills involves a mix of types of learning, including learning that is self-directed, collaborative, and enquiry-based. Measuring a student's proficiency when they are learning in these ways requires richer forms of assessment such as learning journals, portfolios, vivas and presentations. Many schools around the world are operating within systems that require their students to participate in national exams - but this does not need to prevent them from taking a flexible approach to assessment. Schools like Discovery 1 in New Zealand and Matthew Moss in the UK have shown that it is possible to design an enquiry-based curriculum which covers the material required for national exams, without sacrificing the flexibility that allows students to choose their own paths through learning.

What you assess, and how you assess, are critical to determining what, and how, young people learn. How often you assess is also important. The best assessment is continuous – good teachers are assessing all the time, alert to which students grasp a concept, which are confused, and which are simply distracted. Applying the same continuous attention to written work is impossible – for humans. But this is something that computers can do very well. Organisations such as the Khan Academy, which offers free online courses in maths and sciences, have developed programs that can instantly tell you not just what questions a student is getting right or wrong, but what types of questions the student struggles with most, what concepts the student does not yet seem to have grasped, even how much time a student is spending on each question. By giving routine work like this to machines, we can give teachers more time to design the curriculum and give their students serious face-to-face time.

The truth is that we don't always know how to assess the skills that young people need to develop, or the types of learning that will help them develop these skills. There is a good reason that so much assessment tests memorisation: memorisation is very easy to measure. 21st century skills are not so easily measured – but they are too important to ignore, so measure them we must.

Image courtesy of Institute of Play

Work with families, not just children

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It is widely recognised that involving parents in their children's education is crucial – there is a strong association between family involvement and student achievement. Many schools are recognising the need to work with parents, in a variety of ways, to help their students be the best they can be. And some schools are going much further than this, finding holistic and innovative approaches that form bridges between the school and community.

Some schools are engaging families by inviting them to regular events where their children present their work, such as the student-run project exhibitions at High Tech High in California. Others are engaging parents by ensuring they have a say in how the school is run and what is taught, with some going as far as co-creating the curriculum with parents.

Discovery 1, a primary school in New Zealand, goes even further: the curriculum is designed by the whole community, with workshops taught by parents who have knowledge in specific subjects. Parents are seen as partners in schooling: families can choose to have days of learning at home, in addition to parents providing support and guidance in school to teachers and learners alike.

In addition to involving parents in their children's education, schools are focusing on whole-family learning, including literacy, IT, maths and parenting skills. Some of these courses are aimed solely at parents; others, like those provided by Mayfield Primary School in London during the last 30 minutes of the school day, provide space for parents to learn alongside their children. Parents also form vital support networks with one another, often taking their knowledge into the wider community.

Many schools are recognising the need to work in partnership with other services that enable parents to access information and support, particularly to improve the life chances of the most disadvantaged students. In London, primary schools in Camden are working with the Tavistock and Portman NHS Foundation Trust to offer talking therapies to parents who need help. Therapists working on site can identify families in need of support, many of whom are not registered with local health services, before they reach crisis point. Similarly, Harlem Children's Zone in New York is an interconnected programme of schools and social services which offers schooling and childcare as well as adult learning and advice on how to access financial, legal and medical services to all families in the area.

Social networking can be invaluable in fostering school communities, especially for parents who struggle to find time to be involved in school activities. Facebook is a useful tool for displaying students' work, giving parents a window into the classroom and acting as a prompt for discussions around classroom topics at home. The site creates a constant dialogue between parents, teachers and students, keeping parents informed and engaged at all times and bridging the gap between school and home.

Strengthening relationships between schools, parents and the community enhances student engagement, behaviour and achievement, improves outcomes for families and builds social capital in communities. Schools that are embracing this approach have become shared spaces with resources that the community has access to and ownership of – making the school into an institution with genuine reach and impact beyond its walls.

Image courtesy of Discovery 1

Power to the student

'Student voice' – that is, giving students the opportunity to have a say in issues that affect them, has come a long way since the experiments of a few radical schools in the 1970s. Many schools now boast student-led School Councils, for example, and one might argue that students have more control over their education than ever before. However, it remains the case that very few students are involved in key strategic decision making in their school, and fewer still at a regional or national level. But increasingly, educators are cottoning on to the potential this has to change both the experiences of students, and the entire education system.

Allowing students to have control over their education helps them to feel valued, to have a stake in their school and to take ownership of their learning. There is growing evidence that it can also improve engagement and attainment: **when comparing achievement, attendance and exclusions across similar schools those that promote true student participation fare better**. Scandinavian countries have long had a culture of participation at the heart of their education systems. It is often mandatory for students to be represented on governing bodies of their schools, for example. Finland, top of the international student-performance league tables, has students not only making strategic decisions at a school level but, via consultations with policy makers, also taking their voice right to the top to influence national decision making.

In the UK the UNICEF UK Rights Respecting School Award (RRSA) initiative, operating in over 600 schools, encourages schools to place the UN Convention on the Rights of the Child at the heart of their ethos and curriculum. It has demonstrated an improvement in child well being, a decrease in bullying, an improvement in achievement and participation, a positive effect on attitudes and a more inclusive, caring school atmosphere.

Participation in high-level strategising and decision-making also helps students to gain the attributes that are more in demand in the 21st century. Attributes such as social responsibility, cross-cultural sensitivity and emotional intelligence are all fostered by actively engaging in student participation. Roles in democratic structures give experience of balancing individual needs with those of your peers and considering the bigger picture when making decisions, both of which are beneficial to students entering the world of work.

Getting involved in governance at school also helps students to see the benefits of citizenship, and may help young people be more interested and active citizens as adults. This is particularly relevant because many countries are experiencing not just disengagement in school, but disengagement in society as a whole, manifested most obviously in declining voting turnouts from young people.

What we are talking about is not tokenistic involvement. It's not about students having a say in minor decisions, such as dress codes or dinner menus. Fundamentally, this is about giving students real power over strategic decision making at all levels. We need to recognise that students aren't just passive recipients in their education, but potential partners in learning. If we do this we will foster school cultures where everyone participates in education and learning.

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Image courtesy of School

So what next?

When people are presented with examples of innovative practice from their field, such as the ones we've presented here, they usually react with some combination of three responses:

1. These are really inspiring!
2. These all sound great, but they would never happen in my school/town/country.
3. Enough with the innovation! We educate children perfectly well already.

If we have inspired you, we're pleased – and we've got some advice about what you can do next.

If we've made you feel dispirited about your own situation, remember that the examples in this publication can be implemented on many different levels. Some, such as giving students 'independence time' (page 11) can take place in a single class without getting permission from anyone else, and others, such as attending teachmeets (page 19) are all about individual teachers taking control of their own professional development. It's true that many other examples require support from headteachers, or even national leaders, in order to take place – but that's no reason not to do what you can, wherever you are.

If you're not interested in 'innovation' in education at all, then you're not alone. And although innovation is clearly of interest to us at Innovation Unit, fundamentally what we do is find solutions to challenges – which is what we are talking about here. It is generally acknowledged that a world changing as rapidly as ours presents us with the challenge of preparing our young people for an uncertain future.

What we've proposed here is no more than a set of solutions to this problem.

So what now?

There is no single recipe for educating young people for the 21st century. So, whether you're a teacher, a parent, a student, a policymaker, or just somebody interested in education, you can get involved with refining ideas like the ones in this publication and developing brand-new ones.

The first thing to do is to find out about more about what's happening now, and get involved with the global conversations that are already taking place about the future of education. You can find out more about all the examples in this publication by Googling them, and you can find a short guide to blogs and Twitter on the next page.

Then, start experimenting: try out some of the ideas in this publication, or try something you read about on a blog, and see what happens! Some experiments will succeed, some will fail, but you (and the young people you're working with) will learn from all of them.

Image courtesy of High Tech High

To find out more about our work in education visit
www.innovationunit.org/knowledge/
our-ideas/21st-century-education

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About us

We are the Innovation Unit for public services. We have a strong track record of supporting leaders and organisations delivering public services to see and do things differently. They come to us with a problem and we empower them to achieve radically different solutions that offer better outcomes for lower costs. We are a not-for-profit social enterprise and we work to influence public debate, re-shape public policy and transform public services.

To find out more about our work please visit our website at:

www.innovationunit.org

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